ASOS MODIFICATION NOTE 74 (for Electronics Technicians)
Maintenance, Logistics, and Acquisition Division
W/OPS12: WDW

SUBJECT   : ACE-IDS Interface Port Assignment and Configuration

PURPOSE   : Instructions for Automated Surface Observing System (ASOS)
                             Controller Equipment - Interface Display System (ACE-IDS)
                             configuration.

EQUIPMENT   : ASOS Acquisition Control Unit (ACU) (AACU)
AFFECTED

PARTS REQUIRED   : V.3225 Modem (S100-1A3A1-2) at selected sites, see attachment A.
                             Serial I/O (SIO) Board (S100-1A2A6-1) at selected sites, see
                             attachment A.

SPECIAL TOOLS   : None.
REQUIRED

MODIFICATION   : Modems and SIO Boards will be initial issued by the National Weather
PROCUREMENT   Service Headquarters.

EFFECTIVITY   : All ASOS systems listed in attachment A.

ESTIMATED TIME   : 1 Hour.
REQUIRED

EFFECT ON OTHER   : None.
INSTRUCTIONS

AUTHORIZATION   : This modification is authorized by Request for Change **FAA157A**.

VERIFICATION   : This modification has been tested for operational integrity and verified
STATEMENT   by the Federal Aviation Administration (FAA).

SPECIAL   : None.
INSTRUCTIONS

GENERAL:

This modification note provides instructions for configuring the port assignment and ACE test
configuration for the ACE-IDS connection. Inside the ACU cabinet, NWS personnel will install all
equipment necessary in order to transfer ASOS data to the ACE-IDS computer.

NOTE: Both the hardware interface and ACU software (Version 2.6) are identical to the existing ACE interface.

The FAA will install and maintain all ACE-IDS equipment.

PROCEDURE:

NOTE: At sites requiring an additional SIO board (Attachment A), install this SIO board now in accordance with Table 2.5.17, page 2-134 and the item drawing on page 2-177 in the Site Technical Manual. Once the SIO board is installed, proceed to the Hardware Configuration Page (**REVUE - SITE - CONFG - HDWE**) and change the number of SIO boards installed in the ACU. At sites designated as "Remote" connection types (Attachment A), a V.3225 modem will be needed to transfer ASOS data to the ACE-IDS equipment. In this case, install a V.3225 modem as outlined in Modification Note 12.

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1.   At the Operator Interface Device (OID), proceed to the Configuration Page (**REVUE - SITE - CONFG - COMMS**). If "OID-2 SECONDARY" is present, record this SIO port. If "OID-2 SECONDARY" is not present, locate an empty slot and record this SIO port.

2.   Where applicable, disconnect any equipment at the SIO port identified in step 1.

3.   **For Remote connections**, connect the SIO port to the DTE connection on the V.3225 modem. On the V.3325 modem, connect the DCE connection to the 1A9J7 connector at the bottom of the ACU cabinet.

4.   Plug the ACE-IDS connection into the SIO port.

5.   At the OID, return to the Configuration Page. Proceed to the SIO port to which the ACE-IDS connection was just made. Change this port function (**CHANG**) from "OID-2 SECONDARY", if applicable, to "ACE-IDS". All other parameters for this port remain in their default settings as listed below:

	FUNCTION	ACE-IDS	
STATUS	ENABLED	HANDSHAKE	NONE
BAUD RATE	9600	CONNECTION	LEASED
PARITY SELECT	NONE	MODEM SLOT	(can vary)
BITS/CHAR	8	DIAL TYPE	TONE
STOP BITS	1		

REPORTING MODIFICATION:

Target date for completion of this modification is as soon as possible upon receipt of this modification note. Report completed modification on an NWS Form A-26, Maintenance Record, Appendix B, using the instructions in Engineering Handbook No. 4 (EHB-4), Engineering Management Reporting System (EMRS), part 2, Appendix F. Report the modification to the ACU and DCP using the equipment code **AACU** in Block 7. Record a modification number of **74** in Block_17a of the A-26. Attachment B to this modification note contains an example WS Form A-26, Maintenance Record.

Mark Paese (Acting)
Chief, Maintenance, Logistics, and Acquisition Division

Attachment A - Test Sites
Attachment B - Sample WS Form A-26

Attachment A

Site ID	Facility	Region	Remote or Local	SIO board
CPS	St. Louis Downtown Parks Airport	Central	Local	?
STL	St. Louis Tower - Lambert Field	Central	Local	
SUS	Spirit of St. Louis Airport	Central	Local	?
BWI	Batlimore Tower	Eastern	Remote	
DCA	Washington Reagan National	Eastern	Local	
IAD	Dulles Tower	Eastern	Remote	
RIC	Richmond Tower	Eastern	Remote	
HNL	Honolulu Tower	Pacific	Remote	
ITO	Hilo Tower	Pacific	Remote	
JRF	Kalaeola Tower	Pacific	Local	?
KOA	Kona Tower	Pacific	Remote	
LIH	Lihue Tower	Pacific	Remote	
MKK	Molokai Tower	Pacific	Remote	?
OGG	Kahului Tower	Pacific	Local	
ATL	Atlanta Hartsfield Tower	Southern	Local	
CSG	Columbus, Georgia Tower	Southern	Local	
DFW	Dallas - Fort Worth Regional Tower	Southern	Local	
MCN	Macon, Georgia Tower	Southern	Local	
OKC	Will Rogers World Tower	Southern	Local	
PWA	Wiley Post Tower	Southern	Local	
APC	Napa Tower	Western	Local	
CCR	Concord Tower	Western	Local	
HWD	Hayward Tower	Western	Remote	
LVK	Livermore Tower	Western	Remote	
MOD	Modesto Tower	Western	Local	
MRY	Monterey Tower	Western	Local	
OAK	Oakland Tower	Western	Local	
SAC	Sacramento Exec Tower	Western	Remote	

Site ID	Facility	Region	Remote or Local	SIO board
SCK	Stockton Tower	Western	Remote	
SFO	San Francisco Tower	Western	Remote	
SJC	San Jose Tower	Western	Remote	
SMF	Sacramento Intl Tower	Western	Local	
SNS	Salinas Tower	Western	Local	
STS	Santa Rosa Tower	Western	Local	

Attachment B

	Document Number
ENGINEERING MANAGEMENT REPORTING SYSTEM MAINTENANCE RECORD	**G 49978**

General Information	**1.** Open Date **09/ 23 / 01**	Time **0900**	**2.** Initials **DKR**	**3.** Response Priority (check one) ○ Immediate ○ Low ○ Routine ⊗ Not Applicable	**4.** Close Date **09 / 23 / 01**	Time **1030**

5. Description

CONFIGURE PORT ASSIGNMENTS FOR ACE-IDS IAW NOTE 74

Equipment Information	**6.** Station ID **IAD**	**7.** Equipment Code **AACU**	**8** Serial Number **000731**	**9**. TM **M**	**10**. AT **M**	**11**. How Mal. **999**

1 2. *EQUIPMENT OPERATIONAL STATUS TIMES*	**a. Fully Operational** **0:30**	**b.** Logistics Delay	Partly Operational **c.** All Other	**d.** Logistics Delay	Not Operational **e.** All Other **1:00**

13. *Parts Failure Information*								**14.** *Work Load Information*	
Block #	**a.** ASN	**b.** NSN	**c.** TM	**d.** AT	**e.** How Mal.	**f.** Qty.	**g.** Maint. Hrs.	Type	Staff Hrs.
1								**a.** Routine	
2								**b.** Non-routine	
3								**c.** Travel	**0:30**
4								**d.** Misc.	**1:00**
5								**e.** Overtime	

Miscellaneous Information	**15.** Maintenance Comments **CONFIGURED PORTS AND ACE TEST FOR CONNECTION**	**16**. Initials **DKR**

17. *SPECIAL PURPOSE REPORTING*	**a.** Mod. No. **74**	**b.** Mod./Act./Deact.Dat **09/23/01**	**c.**	**d.**	**e.**

18. *CONFIGURATION MGMT. REPORTING* (use as directed)	ASN	Vendor Part Number (New Part)	Serial Number (Old Part)	Serial Number (New Part)